

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of

Peter BRITTINGHAM et al.

Serial No.: 09/654,949

Group Art Unit: 3714

Filed: September 1, 2000

Examiner: Chanda L. Harris

For: COMPUTER-BASED TEST-ITEM GENERATION AND CLONING

**AFFIDAVIT OF RANDY ELLIOT BENNETT UNDER 37 C.F.R. § 1.131**

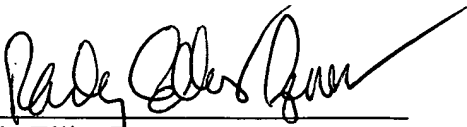
Mail Stop Non-Fee Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

I, Randy Elliott Bennett, do hereby declare under oath as follows:

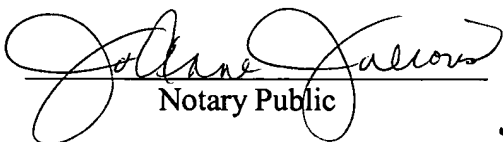
1. I am a co-inventor of the above-referenced application (the "Application").
2. I am and have been employed by Educational Testing Service ("ETS") for the past twenty-four (24) years. I presently hold the position of Distinguished Presidential Appointee and I am responsible for supervising research and development activities in the Department of Research and Statistics. Throughout my twenty-four year tenure at ETS, I have been involved in some capacity with the research and development of educational testing. In addition, for the past ten (10) years, I have been involved in researching and developing test creation systems.
3. Prior to November 13, 2001, I and Mark K. Singley conceived of a system and methodology to automatically or semiautomatically generate test items. In particular, the methodology conceived of included creating a model for a test item by variabilizing components of the test item and using a simultaneous constraint solver to generate variants of the test item. Later development with respect to the methodology was driven by problems and inefficiencies in the system related to embodying the methodology in specific software and/or hardware platforms.
4. The methodology conceived of prior to November 13, 2001 is set forth more fully in the research report entitled: "Validation and Extension of the Mathematical Expression Response Type: Applications of Schema Theory to Automatic Scoring and Item Generation in Mathematics," which is attached hereto as Exhibit A. This report was completed July, 1998, but not printed for publication until after December 3, 1998 as shown on the ETS printing requisition form attached as Exhibit B.

Affidavit of Randy Elliot Bennett

5. I declare that the statements made herein are based on my personal knowledge and are true, and I make these statements with the knowledge that willful false statements are punishable by fine or imprisonment or both (18 U.S.C. 1001), and that willful false statements may jeopardize the validity of this patent application, or any patent issuing therefrom.

  
\_\_\_\_\_  
Randy Elliot Bennett

Sworn to and subscribed before  
me this 19th day of November, 2003

  
\_\_\_\_\_  
Notary Public

My Commission Expires:

JO ANNE JULIOUS  
NOTARY PUBLIC OF NEW JERSEY  
MY COMMISSION EXPIRES JUNE 21, 2005

